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Freeing industrial gases from hydrogen sulfide with
recovery of elemental sulfur. M. V. Hoffman, S. G.
Armen and R. M. Mikhelson. *Chemical Abstracts* (U. S.
S. R.) 1953, No. 8-6, 40-AS; *cf. C. A.* 48, 9870. A
process for S recovery from gases by absorption of H₂S by
an alk. min. of As₂O₃ is described. When H₂S is absorbed
in a freshly prep'd. alk. min. of As₂O₃, Na₂As₃ and
Na₂As₂ are formed. After blowing air through
the min., oxidation of As^{III} to As^V takes place with forma-
tion of Na₂As₃As₂S₂.
James Sorel

PROCESSING AND RECOVERY OF HYDROGEN SULFIDE
The preparation of sulfur from coke gas by a method analogous to the Thyssen process on a condensatory scale is known. M. V. Holtzman, B. G. Anisov and K. M. Mikhaleva, "Zh. Tsvet. Met." (Moscow) 1954, No. 8, 17-23; cf. C. A. 47, 6866. Coke gas is passed at the rate of 300 cu. m. per hr. through the app. described by H. and A. (C. A. 38, 2875). The liquid which absorbs the H₂S circulates at 25 l. per cu. m. of gas. It contains 5-7 g. per l. of As₂O₃. The ratio of NaOH to As₂O₃ must not exceed 3:1 unless NH₄OH is present, in which case, a slightly higher ratio is permissible. In the regenerator 30 cu. m. of air per hr. is sufficient. The whole process is run at 40°. Removal of H₂S from the gas is 100-75%; recovery of S from the sulf. is 90-100%. J. M. Lancaster

ASA-51A METALLURGICAL LITERATURE CLASSIFICATION

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21

Cooling the gas nozzle in water streams. M. V. Nefimova
and D. B. Dorofteev. *Coke and Chem.* 1978, N. 10, p. 79,
No. 12, 21-7(1980); *Chemie & Industrie* 60, 913-14.
Cooling with H₂O and steam is preferable to the use of
H₂O alone. A. Papainen-Couture

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

ASH-SLA LIBRARY

Serials #

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REF'D

Minimization of hydrogen sulfide from industrial gases,
with recovery of elementary sulfur. IV. M. V. Hoff-
man, S. G. Aronov, S. B. Sichchenko and M. B. Khvat-
Coke and Chem. (U. S. S. R.) 1936, No. 2-3, 91-100; cf.
C. A. 29, 3140. - 98.5-99% of the H₂S in coke-oven gases
can be eliminated by scrubbing with aq. (NH₄)₂AsO₄, and
98.8% of the absorbed H₂S is recovered as S. B. C. A. 7

ASB-11A METALLURGICAL LITERATURE CLASSIFICATION

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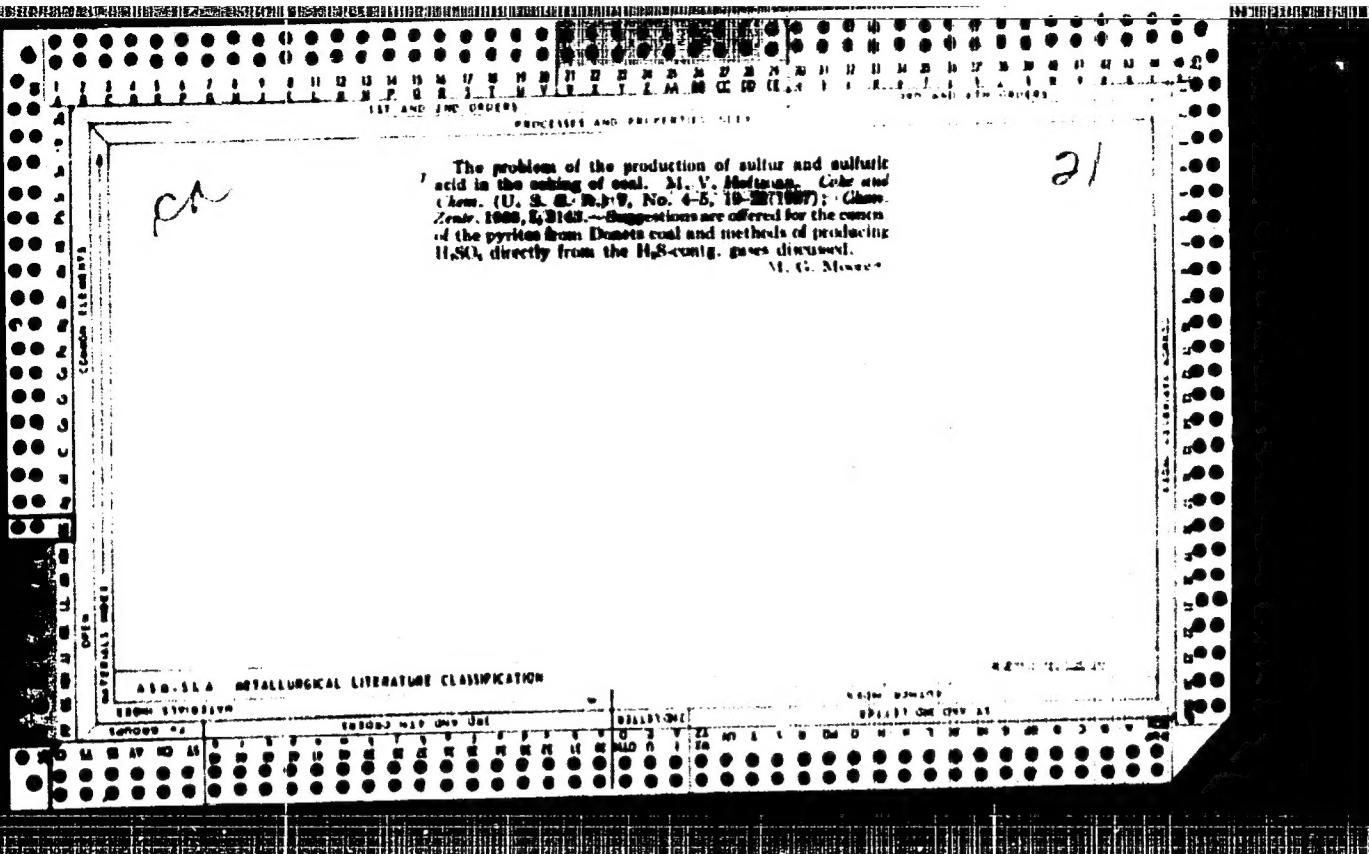
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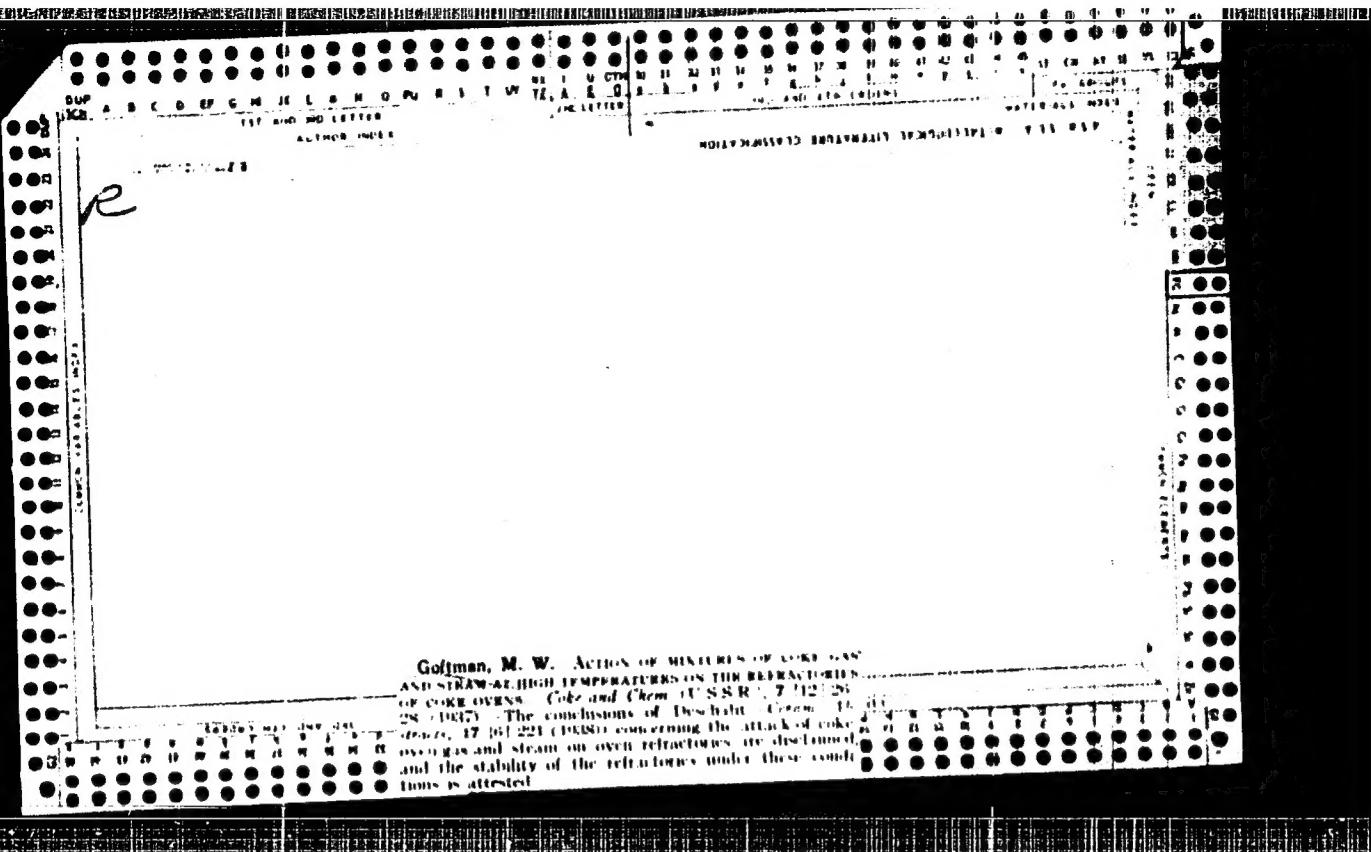
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1. Influence of pyrites on the final sulfur content of coke
M. V. Hoffman, I. A. Kopelevich and Kh. M. Mouseva
COKH Tsvetnoy (U. S. S. R.) 1937, No. 8, 10-13.
Decompr. of FeS₂ to FeS commences at 500° and is practically complete at 600°. In presence of C the reaction begins at a lower temp., but residual S is greater, probably owing to adsorption of S by C. Under conditions of coking, loss of S amounts to 30% and of sulfide-S to 70%
B. C. P. A.

ALB-SLA METALLURGICAL LITERATURE CLASSIFICATION

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Evaluation of various methods for the production of sulfuric acid from coke-gas hydrogen sulfide. M. V. Hoffman and M. S. Litvinenko. *Coke and Chem.*, U. S. S. R. 1939, No. 3, 39-42; *Khim. Referat. Zhur.* 1939, No. 7, 73-4; cf. C. A. 33, 53087. For the recovery of H_2S from coke-oven gas, the following methods were investigated: "Pto," "Sobord," phenolate, absorption with caustic soda, NH_3 absorption and phosphate. None of these methods is recommended for use in the industry.

W. H. Henn

APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R000615530001-0"

The prospect of utilizing coal pyrite. M. V. Hodson and O. P. Venzel. *Colloq. and Chem.* (U. S. S. R.) 11, No. 3, 6-10 (1941); *Chem. Zentral.* 1942, 1, 1032. The possibilities of using coal pyrite in the HgSb_3 plants in the south of the U. S. S. R. are discussed. At present only coal pyrite assayed by hand is used in the Ural plants. It is roasted in mists, with pyrites from the Ural. By using roasting equipment still larger amounts of pyrite concentrates can be obtained from the gang of the coal of the Donets region. This can be used in mists, with pyrites from the Ural for the production of HgSb_3 .

M. G. MAYER

APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R000615530001-0"

Goettman, M. L.

Mixture of phthalic and maleic anhydrides. M. V. Gostling and A. J. Golub. U. S. P. 2,100,057, Sept. 20, 1938. The mix. is obtained by contact vapor-phase oxidation of fumer with air. As catalyst is used 1/10th which insures a yield of phthalic anhydride up to 90%.

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APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R000615530001-0"

VODNEV, G.G.; SHELKOV, A.K.; DIDENKO, V.Ye.; FILIPPOV, B.S.; TSAREV, M.N.;
ZASHVARA, V.G.; LITVINENKO, M.S.; MEDVEDEV, K.P.; MOLODTSOV, I.G.;
LGALOV, K.I.; RUBIN, P.G.; SAPOZHNIKOV, L.M.; TYUTYUNNIKOV, G.N.;
DMITRIYEV, M.M.; LEYTES, V.A.; LERNER, B.Z.; MEDVEDEV, S.M.; REVYAKIN,
A.A.; TAYCHER, M.M.; TSOGLIN, M.E.; DVORIN, S.S.; RAK, A.I.; OBUKHOV-
SKIY, Ya.M.; KOTKIN, A.M.; ARONOV, S.G.; VOLOSHIN, A.I.; VIROZUB, Ye.V.;
SHVARTS, S.A.; GINSBURG, Ya.Ye.; KOLYANDR, L.Ya.; BRIJETSKAYA, A.F.;
KUSHNAREVICH, N.R.; BRODOVICH, A.I.; NOSALEVICH, I.M.; SHTROMBERG, B.I.;
MIROSHNICHENKO, A.M.; KOPELIOVICH, V.M.; TOPORKOV, V.Ya.; AFONIN, K.B.;
GOITMAN, M.V.; SEMENENKO, D.P.; IVANOV, Ye.B.; PYZSAKHZON, I.B.;
~~KUSTOV, B.I.~~; IZRAELIT, E.M.; KVASHA, A.S.; KAPTAN, S.I.; CHERNOVYKH,
M.S.; SHAPIRO, A.I.; KHALABUZAR', G.S.; SEKT, P.Ye.; GABAY, L.I.;
SMUL'SON, A.S.

Boris Iosifovich Kustov; obituary. Koks i khim. no.2:64 '55. (MILIA 9:3)
(Kustov, Boris Iosifovich, 1910-1955)

Goftrman, M. V.

USSR/Chemical Technology - Chemical Products and Their Application. Treatment of Solid Mineral Fuels, I-12

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 62536

Author: Goftrman, M. V., Golub', A. I.

Institution: None

Title: Catalytic Oxidation of Phenanthrene and of Anthracene Fractions. Communication 1.

Original
Periodical: Zh. prikl. khimii, 1955, 28, No 5, 507-515

Abstract: Phenanthrene (I) and anthracene fractions were oxidized for the purpose of producing phthalic anhydride (II). The catalyst was fused vanadium pentoxide. Optimal operating conditions were determined by vapor phase oxidation of pure naphthalene. At 460°, contact time ~2 seconds and ratio of air to vaporized substance ~15 l/g yield of acidic products recomputed as II was 91% or 79% of theory. On oxidation of pure I optimal temperature 448-449°, air to I ratio (l/g) 20:1, contact time 4-6 seconds. Yield of

Card 1/2

USSR/Chemical Technology - Chemical Products and Their Application. Treatment of Solid Mineral Fuels, I-12

Abst Journal: Referat Zhur - Khimiya, № 19, 1956, 62536

Abstract: acidic products recomputed as II, 69.8-71.9%. Acidic products consist on the average of 86% II and 14% maleic anhydride (III). On oxidation of redistilled, washed anthracene fraction, boiling range 310-345°, yield of acidic products on the basis of I is 112.22% of which 78.90% is II and the remainder III. In addition there are obtained 62.7% anthraquinone on the basis of theoretically calculated amount of anthracene present in the fraction. By boiling with 5% alkali and sublimation an anthraquinone MP 286° is obtained which does not depress the melting point of pure synthetic anthraquinone and has identical other characteristics with the latter. Yield of acidic products on catalytic oxidation of unwashed first anthracene fraction is 287.51% of the theoretically calculated on the basis of the phenanthrene; 188.14% of these are II and the remainder III. In addition there is obtained a 42.54% yield of anthraquinone on the basis of the anthracene. Large yield of acidic products on oxidation of anthracene fractions, exceeding greatly their yield from pure I confirms the proposition concerning the advantages of composite utilization of a number of compounds in mixtures for the purpose of obtaining the same product.

Card 2/2

GORTMAN, M. V.

Distr:4E4J/4E2a(j)

✓ Mixture of phthalic and maleic anhydrides with 9,10-chrysenequinone from chrysene and a mixture of 3,10- and 3,8-pyrenequinone from pyrene. M. V. Gortman and A. J. Golub. U.S.S.R. 102,794, May 25, 1960. Carylene or pyrene or the corresponding fractions of coal tar are catalytically air-oxidized in the vapor state with finely divided V_2O_5 catalyst at 400° at an air to vapor ratio of 20-40 g./l. and contact time 1.5-4.5 sec. M. Gortman

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GOFTMAN, M.V., doktor tekhnicheskikh nauk; GOLUB, A.I., kandidat tekhnicheskikh
nauk.

Vaper-phase catalytic oxidation of coal-tar products. Koks i khim.
no.2:51-55 '56. (MIRA 9:7)

1.Ural'skiy politekhnicheskiy institut (for Goftman).2.Vostochnyy
uglekhimicheskiy institut (for Golub).
(Coal-tar products) (Oxidation)

GOFTMAN, M.V.; KHARLAMPOVICH, G.D.

Chemical utilization of coal tar. Koks i khim,no.8:47-50 '56.
(MLRA 10:1)
1. Ural'skiy politekhnicheskiy institut imeni S.M. Kirova.
(Coal tar)

GOFTMAN, M.V., doktor tekhnicheskikh nauk; BUTORIN, V.I., kandidat
tekhnicheskikh nauk.

Letter to the editor. Lit.proissv. no.9:32 S '56. (MLRA 9:11)
(Ooks)

Gofman, M.V.

Improving the Quality of Anthracite Coke, M. V. Gofman and V. I. Butorin, Engineering Production, 1958. [In Russian]. After indicating the importance of obtaining coke of good quality and the frequent failure of Soviet foundries to obtain this, the authors describe experiments with laboratory and sand-works scale equipment in which the effects of changes in coking charge composition on coke quality were studied. Good coke was obtained when anthracite was added to the coking charge, especially when coking speed was increased. With anthracite contents of 25% the pitch requirements (1%) became excessive. The conversion of the charge heated to the pitch melting temperature enabled pitch content to be kept down to 1-2% with an anthracite content of 10-15%.

Goffman, M. D.

Improvement of cupola coke. V. L. Brumley and W. E. Hartshorn. *Trans. Amer. Inst. Min. Engrs.* 1913, No. 53, 71-81. - Addition of 10% antimony to the coke-over charge produced coke which was more uniform, more uniform in size, less porous, and less reactive. Test runs with this coke in a cupola showed decreased coke consumption, higher metal temperature, and lower CO₂ content.

APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R000615530001-0"

GOFMAN, M.V.

GOFMAN, M.V.; GOLUB, A.I.

Catalytic oxidation of basic polycyclic compounds of coal tar and some of its fractions. Zhur.prikl.khim. 29 no.8:1256-1265 Ag '56.
(MIRA 10:10)

1. Vostochnyy nauchno-issledovatel'skiy uglekhimicheskiy institut.
(Oxidation) (Coal tar) (Phthalic anhydride)

GOFMAN, M. V.

Catalytic oxidation of polynuclear aromatic compounds and fractions of coal tar. III. Blockade of vapor phase catalytic oxidation of phenanthrene. M. V. Gofman and A. I. Golub. *Zhur. Prilad. Khim.* 20, 1705-7 (1966); cf. *C.A.*, 64, 3369. Examination of the products of vapor phase oxidation of phenanthrene showed that the overall reaction is much more complex than previously assumed (cf. Lal and Mezarev, *C.A.*, 51, 4312; Choudhury and Babb, *C.A.*, 52, 2524) and involves many intermediates. 0.10-Phenanthrenequinone-NaHSO₃ yields the diketone on treatment with 30% H₂SO₄ directly, but treatment with 30% NaOH yields a green product, which develops the normal diketone color only after dilution or standing. If the product of vapor phase oxidation of phenanthrene is treated with hot AgOH and the soln. treated with NaHSO₃, the resulting ppt. is also green and chromatographic treatment of the substance on paper in C₂H₆ shows a yellow-green substance which fluoresces yellow in the ultraviolet; this shows photographs: $E_{340} = 1.24$ v. (weak) and $+1.00$ v. (strong). The substance appears to be an HO derv. and contains 3.60% HO groups, 60% of ruled, amnt. for mono-OH deriv. of phenanthrenequinone. M. V. Gofman

AUTHOR: Gofman, M.V., Raukas, M.M. and Kharlampovich, G.D. ⁵³⁰
(Urals Polytechnical Institute of S.M. Kirov).

TITLE: Methods of improvement of the technology of production of naphthalene. (Puti uluchsheniya tekhnologii proizvodstva naftalina.)

PERIODICAL: "Koks i Khimiya" (Coke and Chemistry),
1957, No. 4, pp. 45 - 47, (U.S.S.R.)

ABSTRACT: A short review of methods of production of naphthalene is given. It is concluded that the most expedient method of producing naphthalene is: preliminary distillation in order to prepare a wide fraction, its washing and exact rectification on a powerful continuous column. The limits of wide fraction can be varied but 170-300 or 170-280 °C is recommended. In order to provide an additional amount of heat to the naphthalene column necessary for the evaporation of reflux, re-circulation of a part of the bottom product of this column through a pipe pre-heater is proposed. The proposed scheme is shown in the diagram. It is stated that in future two grades of naphthalene will be produced: crystalline naphthalene (Eastern coke oven works) and 80-90 fraction (Southern coke oven works). The latter fraction can be used for oxidation for the production of phthalic anhydride. There is 1 table, 1 diagram and 7 Russian references.

Gofman, M V

Raw materials for organic synthesis from coal tar. M. V. Gofman and A. I. Golub. Zhur. Prilob. Khim. 30, 1220 (1957); cf. preceding entry. —A reply to Pans (loc. cit.). Oxidation of the anthraquinone fraction gave not only phthalic anhydride but also anthraquinone and maleic anhydride, the sources for which are expensive. I. Bencowits

5
4E4
4E80L

Goettman, N.C.

The mechanism of inhibition by heterocyclic nitrogen bases in the pickling of steel with sulfuric acid in the presence of certain anions. W. D. Rutherford and M. V. Goettman. *Jur. Prilled. Khim.*, 50, 1554-1563 (1967). The acids of SCN⁻, I⁻, and Br⁻ increases the inhibition action (γ) of quinoline retarding the solv. of Fe in 12% H₂SO₄ at 70-3°. The effect of CN⁻, Cl⁻, Fe(CN)₆⁴⁻, and Fe(CN)₆³⁻ is negligible. Synthetic complexes Fe(SCN)₆, (C₆H₅N)₄, C₆H₅SCN, and C₆H₅N₃ affect γ to the same degree as equiv. mixts. of C₆H₅N and the corresponding anions. The max. effect is obtained when the proportion of anions added is sufficient to form the complex. $\gamma = \rho/\rho_0$ where ρ is the loss in wt. of Fe g./g. cu. in. and $\rho_0 = 46 \times 10^{-4}$. L. M. M. 1/1/1

Distr: 4E2c/4E4/1E4

135

GOFTMAN, M.V.; KHARLAMPOVICH, G.D.

New technological arrangement for the processing of tar. Trudy
Ural. politekh. inst. no. 59:5-13 '57. (MIRA 11:4)
(Tar) (Distillation)

GORTMAN, M.V.; KHARLAMPOVICH, G.D.

Studying higher phenols from coal tar, Trudy Ural. politekh. inst.
no. 59:14-36 '57. (MIRA 11:4)
(Tar acids--Analysis)

GOFTMAN, M.V.; KHARIAMPOVICH, G.D.

Separating pure α -naphthol, β -naphthol, p-phenylphenol and
durenol out of phenols from coal tar. Trudy Ural. politekh. inst.
no. 59:37-46 '57. (MIRA 11:4)

(Tar acids)

GOFTMAN, N.V.; YEMEL'YANOVA, V.P.

Complete refining of crude anthracene. Trudy Ural. politekh. inst.
no.59:47-67 '57. (MIR 11:4)

(Anthracene)

GOFTMAN, M.V.; LEVIN, I.S.; BARNYAKOVA, T.A.

Producing ultrapure coal as a substitute for pitch in the manufacture of low ash content coke. Trudy Ural. politekh. inst. no. 59:67-73 '57. (MIR 11:4)
(Coal preparation)

GOFTMAN, M.V.

I-i

USSR/Chemical Technology - Chemical Products and Their
Application. Industrial Organic Synthesis

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, 2157

Author : Goftman, M.V., Kharlampovich, G.D.

Inst : ~~—~~
Title : Study of Antioxidant Properties of Higher Phenols.

Orig Pub : Zh. prikl. khimii, 1957, 30, No 3, 439-446

Abstract : A study was made of the antioxidant action of higher phenols. Alpha-naphthol (I) and beta-naphthol (II) were used as comparison standards. Paraffin was subjected to oxidation. The objects of study were: phenol, o-cresol, phenol-cresol fraction, xylanol fraction, polyalkylphenol fraction, I, II, waste products of the recovery of I or II, methyl naphthols, dimethyl naphthols, p-phenyl phenol, methyl phenyl phenols, heavy phenols (boiling above 330°) in an amount of 0.05-0.1%. The content of peroxides was determined. The study was based upon the well-known

Card 1/3

Application. Industrial Organic Synthesis

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, 2157
APPROVED FOR RELEASE: 09/19/2001, 2157 CIA-RDP86-00513R000615530001-0"

paper.

A diagram and description of the unit for the oxidation of paraffin, are included.

Card 3/3

GOFTMAN

AUTHORS: Goftman, M.V., and Kharlampovich, G.D.

68-1-15/22

RUS'YANOVA, N.D.; GOFTMAN, M.V.; BURNISTRENKO, L.A.

Nitrogen-base coal resins as inhibitors of steel corrosion in
acids. Zhur. prikl. khim. v. 31 no.5:748-754 My '58. (MIRA 11:6)
(Gums and resins) (Steel--Corrosion)

5(3)

AUTHORS: Rus'yanova, N. D., Gofman, M. V. SOV/156-59-2-40/48

TITLE: The Extraction of High-Percentage Chinoline, Isochinoline and Acridine From the Bases of Coal-Tar (Poluchenije vysoko-protsentnykh khinolina, izokhinolina i akridina iz oserednykh kamennougol'noy smoly)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Khimiya i khimicheskaya tekhnologiya, 1959, Nr 2, pp 376-379 (USSR)

ABSTRACT: Table 1 shows the boiling-points of the initial material, the basic coal-tar fraction with a specific weight of 1.1023. The computation of a rectifying column working at atmospheric pressure showed that a separation of chinoline and isochinoline is practically impossible under these circumstances. On the other hand, an experimental installation working at a vacuum of 60 mm Hg, produced chinoline with a purity of 94-95%, isochinoline with a purity of 56% and acridine with a purity of 38.5%. The pure preparation of the chinolines was obtained by an azeotrope rectification with diethylenglykol (Table 2). Chinoline was eliminated as chinophthalone by phthalic anhydride.

Card 1/2

The Extraction of High-Percentage Chinoline,
Isochinoline and Acridine From the Bases of Coal-Tar

SOV/156-59-2-40/48

Pure acridine was produced by crystallization in gasoline.
There are 3 figures, 2 tables, and 6 references, 4 of which
are Soviet.

PRESENTED BY: Kafedra khimicheskoy tekhnologii topliva Ural'skogo
politekhnicheskogo instituta im. S. M. Kirova
(Chair for Chemical Technology of Fuels Ural Polytechnic
Institute imeni S. M. Kirov)

SUBMITTED: July 7, 1958

Card 2/2

GOMBER, A.A.

18(5) PAGE 1 BOOK REPORTATION

SOV/2048

Storilevsk. Universal politehnicheskiy institut imeni S.M. Kirova

Teoriya i praktika liternego proizvodstva (Theory and Practice in the
Steel Industry) Moscow, 1959. 231 p. and 322 p.
(Series: Itch. [Sbornik] 775-89) Errata slip inserted. 5,000
copies printed.

Ed.: A.A. Gomber, Corresponding Member, USSR Academy of Sciences,
Kiev, Md. (Ural-Siberian Division, Magnitogorsk) A.Y. Kalinina,
Bogoljubov.

PURPOSE: This book is intended for engineering and scientific workers
of institutes and machine-building plants, as well as for students
of advanced courses of universities.

CONTENTS: This collection consists of articles dealing with practical
problems in foundry processes. The articles review the achieve-
ments of foundry workers in the past 40 years and present
aspects of a current study on the casting of nodular cast iron.
The properties and casting methods. A description is given of
artistic and architectural castings. Consideration is given of
problems of casting thin sheet. Consideration is given to the
use of cast steel in steel and aluminum. The structure
of cast steel is discussed. A recent investigation of vacuum
casting including its characteristic properties and new applications
is also presented. There are 32 pages of photographic illustrations
at the end of the book. No references are mentioned.
Follow each article.

TABLE OF CONTENTS

PAGE 2. IRON CASTINGS

Gomber, A.A. [Doctor of Technical Sciences], and P.I. Karpov,
Promst. [Production of a Special Cast Steel for
Purposes

The author discusses the disadvantages and economic losses re-
sulting from the use of blast-furnace and other low quality
steel in cupola blast. The goal of the investigation involved
to develop a new method of producing superior cupola cast
steel with a density not higher than 7.0 to 7.5 percent, a low re-
actionability, and a given uniform mesh size. Laboratory inv-
estigations confirm the possibility of producing such cast iron
and cast iron available materials.

Gomber, A.A., and T.I. Pechilova. Cupola blast in iron
furnaces. Describes the composition of cupola blast in iron
furnaces, chemical composition of the iron, preventing sat-
uration of the iron with gases from the furnace atmosphere, dis-
cusses non-metallic inclusions, and controlling lining life.
They give the optimum composition of blast required for a furnace
with fine clay lining in order to insure a proper operation of
the cupola and to produce a high quality iron.

TSIPEROVICH, Moisey Veniaminovich; GOFTMAN, M.V., red.; TSYMBALIST, N.N., red.izd-va; ZEF, Ye.M., tekhn.red.; MATLYUK, R.M., tekhn.red.

[Coal preparation in heavy media; fundamentals of theory and practice] Obogashchenie uglei v tiazholykh sredakh; osnovy teorii i praktika. Sverdlovsk, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, Sverdlovskoe otd-nie, 1959. 422 p.

(MIRA 13:1)

(Coal preparation)

AUTHOR: Gofman, M.V.

SOV/68-59-1-2C/26

TITLE: At the Chair of Chemical Technology of Fuels of the Urals Polytechnical Institute (Na kafedre khimicheskoy tekhnologii topliva Ural'skogo politekhnicheskogo instituta)

PERIODICAL: Koks i Khimiya, 1959, Nr 1, p 61 (USSR)

ABSTRACT: 1) A new technology of processing phenols which will increase the yield of light phenols by 5-10% and improve the quality of some high boiling phenols was developed. A project of reconstruction of the phenol plant on the Nizhniy Tagil Works "Plastmass" according to the new scheme is being prepared. 2) A method of separate recovery of ammonia and pyridine bases was developed and is being tested on the Chelyabinsk metallurgicheskiy zavod (Chelyabinsk Metallurgical Works). 3) The work on the development of a new method of ammonia recovery by absorption with acid salts is being continued. In 1959, pilot plant experiments will be organised on the Nizhniy Tagil Works. 4) Catalytic oxidation of phenanthrene-anthracene fractions is being studied. 5) A method of producing high-quality coke from blends containing anthracite was developed. The method was introduced at the Leningrad/Gas Works.

Card 1/2 Possibilities of further increase in the proportion of

At the Chair of Chemical Technology of Fuels of the Urals Polytechnical Institute

SOV/68-59-1-20/26

anthracite by its physical and chemical treatment are being studied. 6) A method of production of high-quality foundry-briquetted coke containing 80-85% of anthracite was developed. Works for the production of such briquettes to be erected in the Sverdlovsk economic region are being designed. 7) Evaluation of various types of brown coals as a chemical raw material is being investigated. Work on the production of metallurgical fuel from brown coals of the Kustanay district has been started.

Card 2/2

5(3)

SOV/80-32-4-36/47

AUTHORS: Kharlamovich, G.D., Gofman, M.V., Raukas, M.M. and Rus'yanova, N.D.

TITLE: Antiseptic Properties of the Components of Coal Tar (Antisepticheskiye svoystva komponentov kamennougol'noy smoly)

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol 32, Nr 4, pp 905-909 (USSR)

ABSTRACT: The antiseptic action of individual components of the coal-tar oil have not been sufficiently studied thus far. Therefore the authors undertook an investigation of the action of various coal-tar oils and their individual components, separated from these oils, on wood-destructive fungi of the Coniophora cerebella and Merulius domesticus species. The results of the experiments are shown in tables and in graphs where figures of the loss of weight, ascribed to the destructive action of the fungi, are given. Conclusions drawn by the authors are as follows:
1. Phenols are more effective anticeptics than bases and neutral compounds, the effectiveness of the latter two is approximately the same;
2. The alkylation raises the antiseptic activity of phenols; 3. Naphthols and their homologs are better anticeptics than phenol derivatives; 4. The activity of compounds with a condensed system of benzene rings is higher than that of compounds with disconnected benzene rings; 5. Compounds

Card 1/2

Antiseptic Properties of the Components of Coal Tar

SOV/60-32-4-36/47

containing the imino-group are a nutritive medium for the fungi, accelerating their growth. Moreover, it was established that a definite maximum of activity exists for all the groups of coal tar components, and the values of the temperatures of these peaks are given. It was also found out that toxicity of impregnating oils did not drop when phenols were removed from them, provided that the phenol content was less than 10%; however, with increasing content of phenols above 10% the toxicity of coal-tar oils increases. Therefore, coal-tar oils with phenol content higher than 10% are especially effective anticeptics. There are 3 graphs, 2 tables and 3 references, 1 of which is Soviet and 2 American.

ASSOCIATION: Ural'skiy politekhnicheskiy institut imeni S.M.Kirova (Ural Polytechnical Institute imeni S.M.Kirov)

SUBMITTED: October 4, 1957

Card 2/2

PHASE I BOOK EXPLOITATION SOV/4350

Soveshchaniye po khimii, tekhnologii i primeneniyu proizvodnykh piridina i khinolina. Riga, 1957

Khimiya, tekhnologiya i primeneniye proizvodnykh piridina i khinolina; materialy soveshchaniya (Chemistry, Technology and Utilization of Pyridine and Quinoline Derivatives; Materials of the Conference) Riga, Izd-vo AN Latviyskoy SSR, 1960. 299 p. Errata slip inserted. 1,000 copies printed.

Sponsoring Agencies: Akademiya nauk Latviyskoy SSR. Institut khimii; Vsesoyuznoye khimicheskoye obshchestvo.

Ed.: S. Bazhanova; Tech. Ed.: A. Klyavinya; Editorial Board: Yu. A. Bankovskiy, Candidate of Chemistry, E. V. Vanaga, Candidate of Chemistry (Resp. Ed.), L. P. Zalukayev, Doctor of Chemistry, and M. M. Kalnyn'.

PURPOSE: This book is intended for organic chemists and chemical engineers.

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Chemistry, Technology (Cont.)

SOV/4350

COVERAGE: The collection contains 33 articles on methods of synthesizing or producing pyridine, quinoline, and their derivatives from natural sources. No personalities are mentioned. Figures, tables, and references accompany the articles.

TABLE OF CONTENTS:

I. PYRIDINE AND QUINOLINE DERIVATIVES OBTAINED FROM
THE THERMAL CRACKING PRODUCTS OF FUELS

Rus'yanova, N. D., and M. V. Gofman [Ural'skiy politekhnicheskiy institut (Ural Polytechnic Institut)]. Methods of Extraction and Ways of Utilizing Coal-Tar Bases 5

Ivashchenko, Ya. N. [Vostochnyy nauchno-issledovatel'skiy uglekhimicheskiy institut (Eastern Scientific Research Institute for Coal Chemistry)]. The Present State and Prospects for the Production and Utilization of Hard Coal Pyridine Bases 13

~~Card 2/10~~

FLASH BOOK INTERVIEW WITH GENEVIEVE ADE

ପାତ୍ରବିନ୍ଦୁରେ ପାତ୍ରବିନ୍ଦୁ

SCIENTIFIC PAPERS PRESENTED AT THE
ANNUAL MEETING OF THE AMERICAN
PHYSICAL SOCIETY, BOSTON, MASS., APRIL 1910.
Edited by W. H. DAWSON.
Price, \$1.00.

ResP. M. I. Tsi. A. M. Schenck, Doctor of Technical Sciences; Professor; Edm. N. Gireborevich, Doctor of Technical

DR. H. H. BROWN, President; Dr. F. K. Kamm, Engineer; Tech. Ed.; Mr. A. Glugokonkwa, and Mr. T. Sheberlin, Mgrs.

GOVERNMENT. This collection of articles discusses problems in the financial processes. Individual articles treat the following subjects:

of metals and their alloys, mechanization and automation of casting processes, aspects of the manufacture of steel, cast iron, and non-ferrous metal castings. No permanent and non-permanent articles.

Recent Achievements in Foundry (Cont.) 30/7/1999

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APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R000615530001-0"

KHARIAMPOVICH, G.D.; GOFTMAN, M.V.; RUS'YANOVA, N.D.

New method of recovering ammonia from coke-oven gas. Koks. i khim.
no. 4:34-39 '60. (MIRA 13:6)

1. Ural'skiy politekhnicheskiy institut.
(Ammonia) (Coke-oven gas)

GOFTMAN, M.V., prof.; KHARLAMPOVICH, G.D.; RUS'YANOVA, N.D.

Ways of utilizing coke-gas ammonia. Zhur. VKHO 5 no.1:38-42 '60.
(MERA 14:4)

(Ammonia)

(Coke-oven gas)

GOFTMAN, M.V.; KHLAMPOVICH, G.D.; RAUKAS, M.M.; RUS'YANOVA, N.D.

Antiseptic properties of the products of coal tar. Trudy Ural.
politekh. inst. no.94:90-102 '60. (MIRA 15:6)
(Coal tar) (Antiseptics)

S/068/61/000/007/001/001
2071/E435

AUTHORS: Rus'yanova, N.D., Gofman, M.V., Gordeyeva, Z.K.,
Privalov, V.Ye., Zubok, A.M. and Khomutinkin, G.V.

TITLE: Production of High Percentage Phenanthrene

PERIODICAL: Koks i khimiya, 1961, No.7, pp.48-52

TEXT: It was recently established that phenanthrene can be used for the production of diphenic acid (a raw material for high quality plastics and resins) and 9-10 phenanthrene quinone (a valuable fungicide) but a technology for its production on coke-oven by-product plants was not available. The authors carried out an investigation in order to establish the most suitable starting raw material and operating equipment and practice for the production of phenanthrene fraction from which a high percentage (above 90%) phenanthrene can be obtained. As about 80% of phenanthrene in tar is concentrated in the anthracene oil, the latter was considered as the most suitable starting material. Calculations of the necessary column efficiencies for the separation of the pair phenanthrene-carbazole were carried out for a fraction containing 27% of phenanthrene and 2% carbazole (anthracene oil obtained from Card 1/6

S/068/61/000/007/001/001
E071/E435

Production of High ...

the first anthracene fraction) and for a fraction containing 25% of phenanthrene and 11% of carbazole (a mixture of anthracene oil and the second anthracene fraction). The results indicated that the first type of raw material can be rectified on a column equivalent to 17 theoretical plates into an 80% phenanthrene fraction, while in order to obtain a similar product from the second type of raw material, a column equivalent to 50 theoretical plates would be necessary. Laboratory distillations of the above two raw materials as well as of the first anthracene fraction and raw anthracene were carried out on a column equivalent to 25 theoretical plates. The results of these laboratory distillations showed that the optimum raw material for the production of a concentrated phenanthrene fraction is anthracene oil. The laboratory results were checked on an industrial scale in the by-product plant of the Nizhne-Tagil Metallurgical Combine. A mixture of anthracene oil from the first and second anthracene fractions, containing 24% of phenanthrene, 11% of carbazole and 3% of anthracene was used for the experiments. The oil was washed with a 15% alkali and 25% acid. Rectification of the

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Production of High ...

washed oil (29.5 tons) was done on a column 1 m in diameter with 33 bubble cup trays. The collection of the fractions was done from a side outlet on the 27th plate. During the rectification two fractions were collected: first up to 320°C (a light fraction) and the second, phenanthrene fraction 320 to 345°C (25.5% of the charge). This contained 80% of phenanthrene, 8% of carbazole and 7.7% of anthracene. All together 84.97% of phenanthrene was recovered in the fraction. It is considered that a vacuum distillation would be more suitable. The required efficiency of the column for the separation of the pair phenanthrene-carbazole for a raw material containing 11% of carbazole under various pressures was calculated. On the basis of the above investigations, the following technological scheme for the production of phenanthrene fraction is proposed: anthracene oil washed from phenols and bases is heated in a pipe furnace to 280°C and passed into the first column equivalent to 18 to 20 theoretical plates. The light fraction is collected at the top, while the residue from the bottom is passed into a second column equivalent to 25 to 28 theoretical plates. The phenanthrene fraction is collected

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Production of High ...

from the top of this column while a part of the residue from the bottom is utilized as a heat carrier, i.e. it is passed into the tube furnace, where it is again preheated and returned to the second column. Both columns operate under a vacuo at 100 mm Hg. The production of high percentage phenanthrene from the phenanthrene fraction was also tested. The fraction contains anthracene, carbazole and various oils (mainly a mixture of methyl homologues of fluorene, phenanthrene and anthracene). Phenanthrene used for further oxidation should be freed from carbazole and resinous substances. It was established that on treatment of phenanthrene fraction with 85% sulphuric acid at 35 to 50°C, phenanthrene is not sulphonated but a carbazole sulphate is obtained which, after separation of the acid layer, can be recovered by dilution of the latter with water (to an acid concentration of 50 to 55%). The treatment removes also resinous substances. This was as follows: the fraction was dissolved in xylole 1:2 or benzole 1:3 and treated with 85% sulphuric acid at 25 to 50°C. The consumption of acid depends on the concentration of carbazole. At a content of 2 to 3%, one

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E071/E435

Production of High ...

washing with 5 vol.% of sulphuric acid for 15 minutes is sufficient. With a carbazole content of 8 to 10%, 2 to 3 washings, each time with fresh acid, are necessary. After the treatment with sulphuric acid the product usually contained not more than 0.2 to 0.3% of carbazole. After distilling off the solvent and a redistillation of the fraction to remove oils, it was pressed at 100 to 120 atm. A 90 to 92% product, melting at 91 to 93°C with an 80% yield was obtained. The main admixture was anthracene. Some laboratory tests (not described) indicated that the product is suitable for the production of diphenic acid. Under industrial conditions, a product melting at 92 to 94°C was obtained. After a single recrystallization from alcohol (1:5), phenanthrene melting at 99 to 100°C was obtained. There are 1 figure, 6 tables and 13 references: 8 Soviet-bloc and 5 non-Soviet-bloc. The work of L.D.Gluzman (Ref.6: Koks i khimiya, 1959, No.2) is mentioned. The references to English language publications read as follows: R.E.Dean, E.N.White, D.McNeil, J.Appl.Chem.,1953,3,10,469; V.N.Kamat, J.de Sa, F.Fernandes, J.Sci.Ind.Res.1956,15,p.8; U.S.Patent 2575314, C.A., 1952, 8152.

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Production of High ...

S/068/61/000/007/001/001
E071/E435

ASSOCIATIONS: Ural'skiy politekhnicheskiy institut (Ural Polytechnical Institute) (Rus'yanova, N.D., Gofman, M.V. and Gordeyeva, Z.K.); VUKhIN (Privalov, V.Ye.); Nizhne-Tagil'skiy metallurgicheskiy kombinat (Nizhne-Tagil Metallurgical Combine) (Zubok, A.M. and Khomutinkin, G.V.)

↙

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S/068/62/000/001/002/002
E071/E435

AUTHORS: Rus'yanova, N.D., Kharlampovich, G.D.,
Belyayeva, G.F., Gofman, M.V.

TITLE: Oxidation of anthracene-phenanthrene fraction with the
production of anthraquinone, phthalic and maleic
anhydrides

PERIODICAL: Koks i khimiya, no.1, 1962, 47-52

TEXT: The process of oxidation of the above fraction in the air-vapour phase over a vanadium-potassium-sulphate-silica gel catalyst (K-26) used in the industrial oxidation of naphthalene was investigated on a laboratory scale. The starting fraction was obtained by rectification of raw anthracene fraction with a column equivalent to 25 theoretical plates. The yield of the fraction was about 50% on raw anthracene. About 80% of anthracene and 75 to 80% of phenanthrene were concentrated in this fraction; mean composition: anthracene - 40 to 45%, phenanthrene - 35 to 40% and carbazole - 10 to 15%. The oxidation of pure anthracene and phenanthrene takes place under the following identical conditions: temperature 370°C, contact time 2.3 to 2.4 seconds, load on the catalyst 25 to 30 g/litre hr.

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S/068/62/000/001/002/002
E071/E435

Oxidation of anthracene- ...

Whereupon from anthracene, anthraquinone is obtained with a yield of 60% and from phenanthrene 54% of phthalic and 13.3% of maleic anhydrides. On shortening the contact time, the oxidation is incomplete and among the products of oxidation of phenanthrene lactone of 2-oxydiphenyl-2' carbonic acid is formed. The oxidation of anthracene-phenanthrene fraction at 370°C and contact time of 2.3 to 2.4 seconds leads to its complete combustion. Only on shortening the contact time to 2 sec was a yield obtained which was equal to that obtained from pure products at a contact time of 2.4 sec. However, there are substantial differences in the conditions of oxidation of phenanthrene:

- 1) the reaction products contained lactone, which on oxidation of pure phenanthrene appears only at a contact time of 1 sec;
- 2) there was a decrease in the combustion of phenanthrene and the total yield of its oxidation products increased to 90% (72% acid products and 18% lactone). On shortening the contact time to 1.36 sec, a similar phenomenon was observed for anthracene; due to a decrease in the degree of complete combustion the yield of anthraquinone increases to 81%. On further shortening of the contact time to 1.06 sec, the yield of

Card 2/6.5

S/068/62/000/001/002/002
E071/E435

Oxidation of anthracene- ...

anthraquinone increased to 84% but simultaneously the yield of anhydrides decreased. An increase in the load on the catalyst from 50 to 66 g/litre hr has a positive influence on the process. Optimum conditions at 370°C were: 1.36 sec contact time and 66 g/litre hr load on the catalyst. The composition of the mixture (proportion of anthracene to phenanthrene and the content of carbazole) also has a considerable influence on the process (Table 3). In the experiments the oxidation products - anthraquinone, lactone and a part of the phthalic anhydride (about 20%) - were caught in the air condenser, the remaining products in water. The separation of the reaction products presented no difficulties. Anthraquinone was purified by washing with hot water to remove phthalic anhydride, with a 20% alkali to remove lactone and then sublimated. The pure product had a melting temperature of 286 to 287°C. The aqueous solution of phthalic and maleic acids was evaporated in vacuo and anhydrides redistilled. These can be used as a mixture or separated on the basis of the difference in their solubility in water. It is considered that under industrial conditions, the condensation of the oxidation products should be done in two

Card 3/6 ✓

S/068/62/000/001/002/002
E071/E435

Oxidation of anthracene- ...

stages; single-stage scrubbing would be difficult due to a high density of the product pulp (a high concentration of anthraquinone). The first stage scrubbing should be done in a Venturi scrubber with a water spray as the cooling medium. It is concluded that the oxidation of anthracene-phenanthrene fraction containing approximately equal proportions of anthracene and phenanthrene and a minimum amount of carbazole would be advantageous on an industrial scale. There are 5 figures, 5 tables and 4 references: 3 Soviet-bloc and 1 non-Soviet-bloc. The reference to an English language publication reads as follows:
Ref.1: Kinneu, C.R., Pinkus, I. Ind. Eng. Chem. 1951, 43, no.12, 2880.

ASSOCIATION: Ural'skiy politekhnicheskiy institut
(Ural Polytechnical Institute)

Card 4/65

Oxidation of anthracene- ...

S/068/62/000/001/002/002
E071/E435

Table 3.

1. raw material
2. contact time, sec
3. load on catalyst, g/litre hr
4. Yield at the theoretical
5. anthraquinone
6. lactone
7. phthalic anhydride
8. maleic anhydride
9. 55% anthracene, 35% phenanthrene and 10% carbazole
10. 45% anthracene, 40% phenanthrene and 15% carbazole.

✓

Card 5/6

GOFTMAN, Mikhail Vladimirovich; ZINGER, S. L., red. izd-va;
ISLET'YEVA, P.G., tekhn. red.

[Applied chemistry of solid fuel] Prikladnaia khimiia tverdogo
topliva. Moskva, Metallurgizdat, 1963. 597 p.
(MIRA 16:7)
(Fuel) (Coal)

RUS'YANOVA, N.D.; GOFTMAN, M.V.; BELYAYEVA, G.F.

Recovery of concentrated phenanthrene from the phenanthrene fraction. Koks i khim. no.8:40-42 '63. (MIRA 16:9)

1. Vostochnyy uglekhimicheskiy institut (for Rus'yanova).
2. Ural'skiy politekhnicheskiy institut im. Kirova (for Gofman, Belyayeva).
(Phenanthrene) (Coke industry--By-products)

GOFTMAN, M.V.; NEFEDOV, P.Ia.

Briquetted coke fuel for cupola furnaces. Koks i khim. no.3;
31-34 '64. (MIRA 17:4)

1. Ural'skiy politekhnicheskiy institut (for Goftman).
2. Vostochnyy uglekhimicheskiy institut (for Nefedov).

LEVIN, I.S.; BELIK, T.N.; GOFTMAN, N.Z.

New types of binders for briquetting derived from petroleum. Ugol'
40 no.6:66-67 Je '65. (MIRA 18:7)

1. Ural'skiy politekhnicheskiy institut.

THE BOSTONIAN

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R000615530001-0"

CA GOFUNG, G.

17

Drying processes at low temperatures. R. Kaushik (Ed.)
Vill and T. Chakung Myanma Ind. S.S.S.R. II, No. 9,
79 M (1980)
M. M. Phifer

1961

GoFUNG, I. I.

U23R / Pharmacology, Toxicology, Narcotics and Hypnotics.

U-2

Abs Jour : Ref. Zh.-Biol., No 2, 1958, No 7926

Author : GoFUNG, I. I., Tsatskis, B.Z.

Inst :

Title : Proprioceptive Effects of Ethyl Alcohol

Orig Pub : Kurskiy Med. in-t, 1958, Vyp. 3, 22-27

Abstract : Experiments were performed on frogs. The muscle surface of the left thigh and the gastrocnemius muscles of both legs were exposed to a 5 -96° concentration of ethyl alcohol on a 5 X 5 cm filter paper for 30 seconds. It was established that a 5 -96° concentration of ethyl alcohol, acting on muscle receptors, caused a cardioinhibitory reflex. Ligation of the blood vessels of the extremity had no effect, although by tying the sciatic nerve above the site of the

Card : 1/2

Card : 2/2

GOYUNO, V.Ye., kand.med.nauk

Condition of the teeth and mouth in children with Down's disease.
Stomatologiya 38 no. 5:16-17 8-0 '59. (MIRA 13:3)

1. Iz detskoj polikliniki No.1 Kiyevskogo rayona Moskvy (glavnnyj
vrach N.A. Rogachevskaya). (MENTAL DEFICIENCY) (MOUTH)

COG, M.

For multiple use of combines; harvesting small grains with harvesting-threshing machines, p. 12, ALLAMI GAZDASAG (Allami Gazdasagok Minisz-teriuma es a Mezogazdasagi es Erdeszeti Dolgozok Szakszervesete)
Budapest, Vol. 8, No. 6, June 1956

SOURCE: East European Accessions List (EEAL) Library of Congress,
Vol. 5, No. 11, November 1956

GOGA, Emilian, ing.

Cast iron used in the charge, and its influence on the hardness
of rolling-mill cylinders. Metalurgia constr mas 13 no.12:1023-
1027 Jl '61.

GOGA, Emilian, ing.

Device for mechanical centering of the ladle for casting
steel in ingots. Metalurgia constr mas 14 no.8:755-756
Ag '52.

1. Uzina "Otelul Rosu".

GOCA, Emilian, ing.

Manufacture of semicalmed steel. Metalurgia si constr mas
15 no.31215-217 Mr '63.

GOGA, F.

Ways of improving certain planned indexes in the exploitation of rolling stock. p. 571.

REVISTA CAILOR FERATE. (Caiile Ferate Române) Bucuresti, Rumania.
Vol. 6, no. 11, Nov. 1958.

Monthly List of East European Accessions (EEAI) IC, Vol. 8, no. 7, July 1959

Uncl.

GOGA, Florian I., ing.

Influence of the state of the curves on the circulation of railroad
vehicles. Rev cailor fer 11 no.1:18-22 Ja '63.

1. Directia regionala Caiile Ferate Romane, Timisoara.

GOGA, Florian I., ing.

Practical method for determination of the opening out of
the line on railroad curves. Rev caillor fer 11 no.11:632-
637 N°63.

1. Sectia 13, Timisoara.

GOGA, Florian I., ing.

Effect of supplementary strain produced in rails by dislocations.
Rev cailor fer 13 no.3:149-157 Mr 65.

1. Section L3, Timisoara.

VEDYAPIN, M.G.; GOGA, I.V.; SHALDAISOV, A.P.

Wider use of winches for roof caving. Ugol' 35 no.2:19-23
(MIRu 13:5)
F '60.

1. Kiselevskiy mashinostroitel'nyy zavod Kemerovskogo
sovnarkhoza.
(Winches) (Mining engineering)

VEDYAPIN, M.G.; GOCA, I.V.; SHALDAISOV, A.P.

Industrial testing of the LMK-20 shunting winch. Ugol' 39 no.1:
50-51 Ja '64. (MIRA 17:3)

1. Kiselevskiy mashinostroitel'nyy zavod.

L 54486-65
ACCESSION NR: AP5017714

RU/0017/64/000/010/0429/0433

5
35

AUTHOR: Iatan, N. (Engineer); Goga, L. (Engineer)

TITLE: Considerations on certain quartzites found in the Romanian People's Republic used in the manufacture of iron-silicon

SOURCE: Metalurgia, no. 10, 1964, 429-433

TOPIC TAGS: quartz, iron, silicon

ABSTRACT: A description of the quartzites from Hobita, Dealul Cernei and Platoul Ricioasa. The chemical composition of the different types is given, as are the principal physical properties including macroscopic and microscopic structure, density, water sorbtion capacity, softening point and behavior when heated to 1,500 degrees centigrade. Orig. art. has 4 figures, 10 graphs, and 7 tables.

ASSOCIATION: Institutul de cercetari metalurgice (Metallurgical Research Institute)

SUBMITTED: 00

ENCL: 00

SUB CODE: MF, MM

NO REF Sovi: 000

OTHER: 000

JPIB

sw
Card 1/1

GOGA, M., ing.

Aspects of the designing of woven fur imitations. Ind text
Rum 16 no.1:29-31 Ja '65.

1. "Tezatoriiile Reunite" Weaving Factory, Bucharest.

ZUBOVICH, V.K.; GOGA, P.I.

Cervical pregnancy. Zdrav. Bel. 7 no.6:57-58 Ja '61. (PLA 15:2)

1. Iz Luzhskoy sel'skoy uchastkovoy bol'nitsy Vitebskoy oblasti
(glavnnyy vrach V.K.Zubovich).
(PREGNANCY, EXTRAUTERINE)

ILIESCU, C.C., prof.; KLEINERMAN, L., conf. ; GOGA, S., dr.

Reserpine in the treatment of several arrhythmias. Med. int.,
Bucur. 12 no. 1:49-54 Ja '60.

1. Incrare efectuata in Clinica medicala a Spitalului "Bernat Andrei", Bucaresti.
(ARRHYTHMIA, therapy)
(RESERPINE, therapy)

ROMANIA

DRAGAIIESCU, C. I., MD; COGA-IONESCU, Silvia, MD; CSAP, C. F., MD;
COPORIN, Rodica, MD.

Institute for Oncology, Bucharest (Institutul Oncologic,
Bucuresti) - (for all); Director: Lecturer O. Costache.

Bucharest, Medicina Interna, No 12, Doc 63, pp 1435-1438

"Results Obtained in two Cases of Severe Leukothrombopenia,
/ with Haemorrhagi-parous Syndrome Occurring after Administration
of Cytostatics, treated with Homologous Haematopoietic Tissue."

(4)

STANIEWSKI, Ryszard; KOWALSKI, Mieczyslaw; GOGACZ, Edward; SOKOŁOWSKA, Franciszka

Susceptibility of Rhizobium strains to phages. Acta microbiol. polon.
11 no.3:245-254 '62.

1. From the Department of General Microbiology, Maria Curie-Sklodowska University, Lublin.
(RHIZOBIUM) (BACTERIOPHAGE)

GOGASZ, Nowalany; GOGACZ, Jan

Effect of isonicotinic acid hydrazide on permeability of tissues and blood vessels. Gruslica 23 no.2:81-87 Feb '55.

1. Z Kliniki Gruzlicy A.m. we Wrocławiu. Kierownik: docent dr.med. T. Garbiński, i z Sanatorium Przeciwgruźliczego P.K.P. w Szklarskiej Porębie Dolnej Dyrektor: dr m. Mostowski. (W pracach laboratoryjnych brała udział asyst.tech. B.Urbanowicz) Szklarska Poreba Dolna, Sanatorium PKP.

(NICOTINIC ACID ISOMERS, effects
isoniazid on blood vessel & tissue permeability)
(OSMOSIS AND PERMEABILITY
permeability of blood vessels & tissues, eff. of
isoniazid)
(BLOOD VESSELS, physiology
permeability, eff. of isoniazid)

POLAND/General Problems of Pathology - Pathophysiology of the
Infectious Process.

U

Abs Jour : Ref Zhur Biol., No 6, 1959, 27269

Author : Garbinski, Tadeusz; Gogacz, Jan

Inst : -

Title : On the Possibility of Utilization of Experimental
Tuberculosis of the Eye in Rabbit for Investigation of
the Process Dynamics in Tuberculous Focus

Orig Pub : Gruzlica, 1957, 25, No 3, 189-194

Abstract : After introduction to rabbits into the camera oculi ante-
rior of 40-80 ml of mycobacterium tuberculosis (MT) of
human type, 3 types of tuberculous process were discov-
ered which depended on the individual characteristics of
the animal without relation to the amount of introduced
MT. The I type is characterized by a limited violent
inflammatory reaction of conjunctiva and partially of
iris with fast reverse development and scar formation.

Card 1/2

- 7 -

S/056/63/044/002/023/065
B102/B186

AUTHORS: Kulik, I. O., Gogadze, G. A.

TITLE: Quantum oscillations in the tunnel contact current of two metals in a magnetic field

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 44, no. 2, 1963, 530-535

TEXT: The authors consider two different metals which are separated by a thin semiconductor layer to which a constant or alternating magnetic field is applied perpendicularly. The tunnel contact current oscillations arising in both cases are calculated (cf. also: Phys. Rev. Lett. 5, 55, 1960; J. Phys. Chem. Sol. 19, 8, 1961; Phys. Rev. 123, 85, 1961). It is shown that these oscillations allow the determination of the extreme cross-sections of the Fermi surface and of the effective masses of the quasi-particles. For the small electron groups the amplitude of the oscillations is sufficiently great; for the large groups it is very small since the probability of tunnelling through the potential barrier is extremely small for the electrons at the extremum sections responsible for the

Card 1/2

S/056/63/0/4/002/023/065
B102/3186

Quantum oscillations in the ...

oscillation phenomena. Another type of oscillation caused by oscillations of the chemical potentials of the metals can be observed in alternating magnetic fields in which the pulse duration T is smaller than the relaxation time τ of the tunnel diode. The amplitude of the oscillation of the chemical potential ζ can be estimated from the relation

$\zeta^{\text{osc}} \sim \frac{\pi}{\sqrt{2}} \Theta \left(\frac{\mu H}{\pi} \right)^{1/2} \exp(-2\pi^2 \Theta / \mu H)$. With $\Theta = 10^0$ K and $H = 10^4$ oe for the small electron groups, $\zeta^{\text{osc}} \sim 10^{-3} - 10^{-4}$ ev; for the large groups it is $\sim 10^{-6}$ ev. τ is estimated from $\tau = RC$ (R and C of the contact); for $v_F \sim 10^8$ cm/sec, $n \sim 10^{22}$ cm $^{-3}$, and $S \sim 1$ cm 2 one obtains $\tau \sim 10^{-3}$ sec.

$T \leq RC$ is easily achieved by raising the gap width. The experimental possibilities are such that the ζ -oscillations can be observed even at relatively high temperatures. There are 2 figures.

ASSOCIATION: Fiziko-tekhnicheskiy institut nizkikh temperatur Akademii nauk Ukrainskoy SSR (Physicotechnical Institute of Low Temperatures of the Academy of Sciences Ukrainskaya SSR)

SUBMITTED: June 17, 1962
Card 2/2

ACCESSION NR: AP4025924

S/0056/64/046/003/0913/0919

AUTHOR: Gogolize, G. A.; Itskovich, F. I.; Kulik, I. O.

TITLE: Quantum oscillations of cold-emission current of metals in a magnetic field

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 46, no. 3, 1964,
913-919

TOPIC TAGS: cold emission, field emission, tunnel current, tunnel current oscillation, chemical potential, number of electronic states, complex cathode emission

ABSTRACT: Following an earlier study of the oscillations of the tunnel current between two metals separated by a thin layer of dielectric, which yielded a more accurate determination of the effective mass and which showed that the tunnel-current oscillations depend significantly on the oscillations of the chemical potential of the metals, the authors investigate theoretically the oscillations of the field-emission current from a metal in a magnetic field perpendicular to the sample surface. The oscillations are shown to be due either to oscillations

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ACCESSION NR: AP4025924

in the number of the electronic states in the magnetic field or to oscillations of the chemical potential of the metal, the latter having usually an appreciable amplitude and the former being significant only for metals having small electron groups. As an example, the features are considered of field emission from a complex cathode consisting of two metals separated by a thin layer of dielectric, through which tunnel current can flow. It is shown that a considerable current can exist even in a relatively weak field incapable of inducing appreciable emission from one of the metals (in the absence of a potential difference between metals). The field-emission current exhibits oscillations associated with both metals. It is pointed out that an experimental investigation of these oscillations is extremely difficult. Orig. art. has: 4 figures and 16 formulas.

ASSOCIATION: Fiziko-tehnicheskiy institut nizkikh temperatur AN UkrSSR (Physicotechnical Institute of Low Temperatures, AN UkrSSR); Khar'kovskoye vystsheye komandno-inzhenernoye uchiliishche (Khar'kov Engineer Officers' College).

SUBMITTED: 27Jul63

DATE ACQ: 16Apr64

ENCL: 00

SUB CODE: PH, GE

NR REF Sov: 009

OTHER: 001

Card 2/2

L 38541-65

EWT(1)/EWT(2)/EWP(6)/T/EWP(8)

Si-2

IJP(c)

GO/IT

ACCESSION NR: AP5005278

S/0181/65/007/002/0112/0140

AUTHOR: Gogadze, G. A.; Kulik, I. O.

TITLE: Oscillations of the tunnel current from thin metallic layers

SOURCE: Fizika tverdogo tela, v. 7, no. 2, 1965, 432-440

TOPIC TAGS: thin film, tunnel effect, quantum effect, potential barrier, superconductivity, particle collision

ABSTRACT: As a supplementary means of studying the energy spectra, the authors investigate theoretically quantum effects arising when electrons tunnel through a potential barrier. These effects are connected with the finite thickness of the metal films constituting the tunnel junction, and are considered for the case when one of the metals (or both) is sufficiently thin (10^{-7} cm in most metals, but as thick as 10^{-5} in the case of bismuth and some other metals). The tunnel current oscillates as a function of the applied bias, and the effective mass of the quasi-particles can be determined from the oscillation period. The authors are interested not in the absolute value of the current, but in its variation upon quantization of the spectrum (for example, on going from the region of high temperatures

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L 38541-65

ACCESSION NR: A25005278

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to low ones). If the tunnel junction is made up of a normal metal film and a superconductor, oscillations of a new type arise, without the usual temperature dependence. Using the approach developed by R. B. Dingle (Proc. Roy. Soc. U. A211, 500 and 517, 1952) the authors investigate also the influence of volume and surface collisions on the amplitude of the current oscillations, and show in particular that the amplitude of the n -th oscillating harmonic decreases by a factor p^{2s} (p -- coefficient of specularity in the reflection of the electron from the film boundary). It is noted that unlike volume collisions, where the oscillation amplitude depends on the reciprocal scattering time exponentially, the variation is slower and not exponential in the case of surface collisions. For example, at a specularity coefficient $p = 0.3$ the amplitude of the first oscillating harmonic will decrease only by a factor of approximately 10. "We thank V. I. Bonch-Bruevich for reading the paper and useful remarks." Orig. aut. has: 31 formulas and 3 figures.

ASSOCIATION: Fiziko-tehnicheskiy institut nizkikh temperatur AN UkrSSR, Charkov
(Physicotechnical Institute of Low Temperatures, AN UkrSSR)

SUBMITTED: 18Jul64

ENCL: 00

SUB CODE: 83,6

NR REF Sov: 004
Card 2/2

OTHER: 007

DRAGANESCU, C.I., dr.; GOGA-IONESCU, Silvia, dr.; CSAP, C.F., dr.
COPORAN, Rodica, dr.

Results obtained in two cases of severe leukothrombopenia with a hemorrhagiparous syndrome, appearing after administration of cytostatics, treated with homologous hematopoietic tissue. Med. intern. 15 no.12:1435-1438 D'63.

1. Lucrare efectuata in Institutul oncologic, Bucuresti (director: conf. O.Costache).

(S) C.G. H.L.H. H.

AUTHOR: Cogala, A. Engineer 307-127-10-3-7/23

TITLE: Methods of Exploitation of Metal Ores in Yugoslavia (Sistemy rezrabotki na metallicheskikh rulakhach Jugoslavii)

PERIODICAL: Gornyy zhurnal, 1959, Nr 3, pp 35-50 (USSR)

ABSTRACT: The author sums up information received on the exploitation of various ore deposits in Yugoslavia. In 1956, 60% of copper ore and 70% of bauxite were extracted by opencast mining. In the lead-zinc mine "Mezhitse", both the overhand stoping and open-stope methods are used. In the Bor' copper mine the sub-level caving method is used. The polymetal mines "Treycha" and "Rudnik", as well as the lead-zinc mine "Zletovo" are exploited by overhand stoping methods. Some details of labor productivity are given. The article was translated from Serbo-Croatian by Engineer Ya A. Fai. There are 4 figures.

- 1. Mining industry--Yugoslavia
- 2. Ores--Production

Card 1/1

PROYENNYY INSTITUT METALURGI, PREDSTAVITELSTVO V SSSR
Republika Jugoslavija

GOGALA, A.

"Planning, designing and rationalization of coal mines" by Alois Rimar. Reviewed by A. Gogala. Rud mat zbor no.2:162 '62.

PAVKO, D.; OCEPEK, Drago, dr. inz., docent; GAFENAUER, S.;
SICHERL, B.; KERSNIC ML., V.; PAULIN, A.; GORUP, M.;
CAZAFURA, K.; VIDERICAR, F.; AHLIN, F.; KAVCIC, J.;
KERSNIC, Viktor, prof. dr. inz.; GOGALA, A.; RAMOVS, A.;
SKUBIC, T.

New books. Rud met zbor no. 2:189-216 '64.

1. Chief Editor, "Rudarsko-metalurski zbornik" (for Kersnic,
Viktor).

GOGALA, L.

"News of Aviation", P. 6, (REPULES, Vol. 7, No. 13, July 1954, Budapest,
Hungary)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12,
Dec. 1954, Uncl.

GOGALA, Matjaz; MICHIELI, Stefan

Seasonal change of colors in some species of Heteroptera.
Biol vest no.10:33-44 '62.

1. Bioloski institut Univerze v Ljubljani. 2. Urednik,
"Bioloski vestnik" (for Michieli).

GOGALA, M.; MICHELI, S.

Color of Heteroptera. Bul sc Young 7 no.3:61-62 Je '62.

1. Biologiski institut Universe, Ljubljana.

GOHAL, Matjaž; PUDLE, Stefan

Monochromatic and dichromatic retinograms in insects. Biol inst Lj:13-20
'64.

J. Biologic Institute of the University of Ljubljana, Ljubljana.
Submitted July 31, 1964.

GOGALADZE, A.S. (L'vov)

Cysticercosis in the radiogram. Vest.rent.i rad. 34 no.5:80-82 S-0
'59. (MIRA 13:3)
(CYSTICERCOSIS radiography)

GOGALADZE, A.S.; RASPOPOV, M.M.; MOIN, S.R.

Lateroscope. Vest. rent. 1 rad. 36 no. 1:60 Ja-F '61. (MIRA 14:4)
(X RAYS—APPARATUS AND SUPPLIES)

GOGALADZE, A.S.

Dosimetric apparatus for filling the large intestine with a contrast medium. Vest. rent. 1 rad. 36 no. 2:61-63 Mr-Ap '61. (MIRA 14:4)
(RADIOLOGY, MEDICAL-EQUIPMENT AND SUPPLIES)

GOCALADZE, A.S.; KUZNETSOV, I.L.

Closed lesion of the lung. Vest. ~~med.~~ i rad. 28 no.2:63-64,
Mr-Ap'63. (MIRA 16:9)
(LUNGS—WOUNDS AND INJURIES)